

Wisconsin Alumni Research Foundation. — DEPARTMENT OF BOTANY, UNIVERSITY OF WISCONSIN, MADISON

LITERATURE CITED

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HERBARIUM TECHNIQUES. — 1. *A Quick Method for Preparing Permanent Mounts of Seeds or Small Fruits*. — The cardboard micropaleontological specimen slide, long a fixture in the geology laboratory, is remarkably well adapted for use by those botanists interested in making detailed studies of seeds or small fruit. Such slides, often referred to as "Cushman Foraminiferal Slides", are 1" x 3" or 1" x 4" rectangles of laminated cardboard into which circular or rectangular cavities of various depths and sizes have been cut. Standard diameter for circular cavities is 12.5 mm; standard dimensions for rectangular cavities are 45 mm x 20 mm. Depths ranging from 1 to 3 mm may be ordered for either circular or rectangular depressions. The floor of the cavities may be plain black (see figures 2, 3, 4, 5) or, in the rectangular type, may be black with a white grid of 60 numbered squares (see figure 1). Thus, in the latter type, as many as 60 separate achene or seed specimens could be mounted upon one slide. The lightness of the cardboard slides is a factor of great value in that samples prepared in this way may, after celluloid slide covers are attached, be easily glued to herbarium sheets. If, on the other hand, a separate seed collection is desirable, a large number of slides may be stored in a small space. All of the above described slides, together with slide covers and slide clips, may be obtained from the W. H. Curtin Company, Houston, Texas or New Orleans, Louisiana.

The micropaleontologist's method of preparing specimens of small fossils is similarly adaptable to botanical work. The

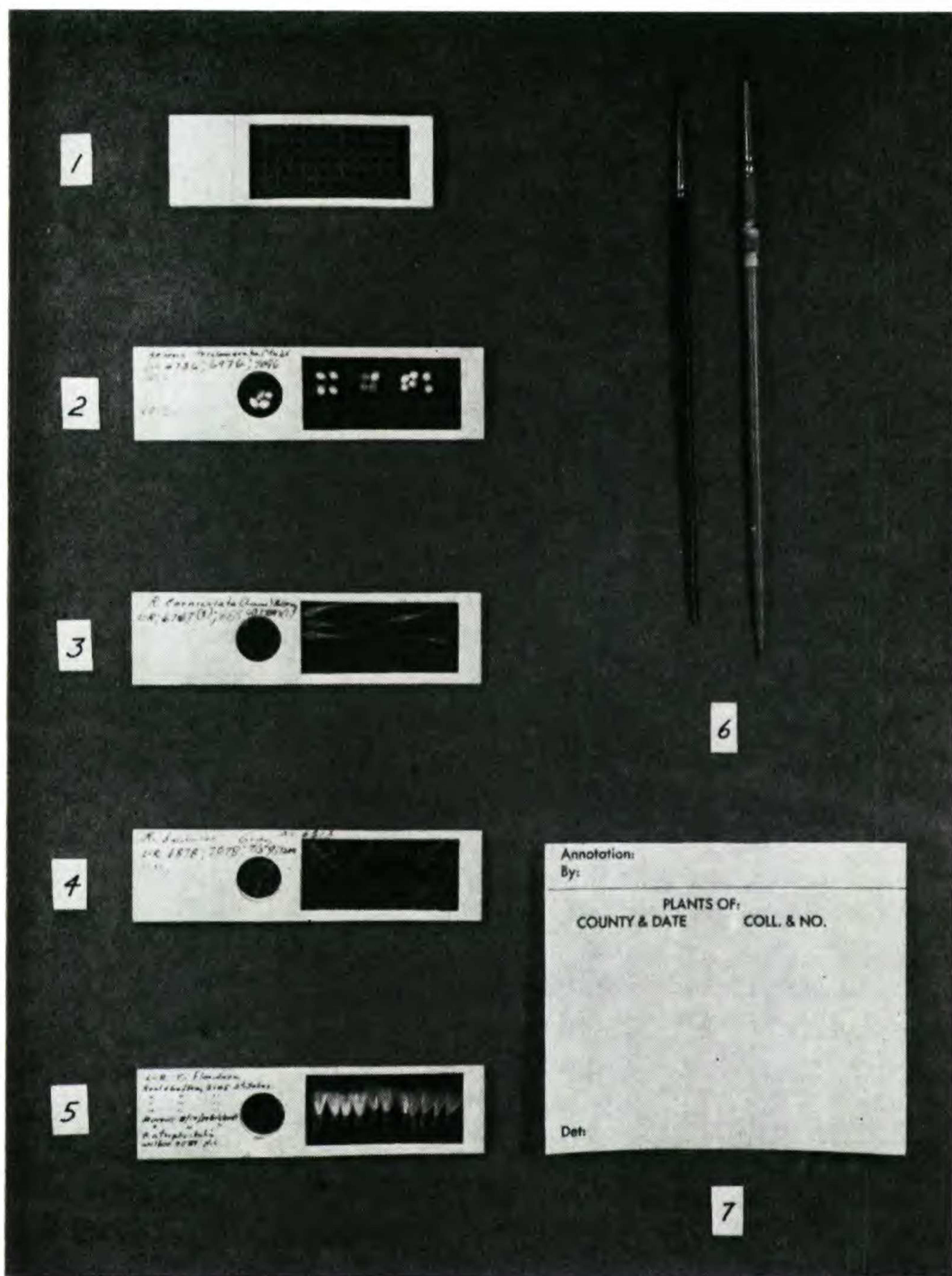


PLATE 1254. Fig. 1. The 1" x 3" micropaleontological slide with a grid-depression 3mm deep (Curtin 14402H). Fig. 2. The 1" x 4" micropaleontological slide (Curtin 14405) with circular and rectangular depressions 2 mm deep. Specimen mount of *Scleria triglomerata* Michx. Fig. 3. Slide same model as 2. Specimen mounts of achenes of *Rhynchospora corniculata* (Lam.) A. Gray. Fig. 4. Slide same model as 2. Specimen mounts of achenes of *Rhynchospora baldwinii* A. Gray. Fig. 5. Slide same model as 2. Specimen mounts of achenes of *Cacalia floridana* A. Gray, *C. atriplicifolia* L. Fig. 6. Camel-hair brushes needed for achene work. Fig. 7. A 3 1/2" x 4 1/4" label with 1/2" of the top reserved for annotation.

microfossils are "picked" individually from sample trays by means of a small, water-moistened, camel-hair brush, then transferred to a slide on which the worker has placed a small drop of glue (usually gumtragacanth in water). A similar brush may be used to apply the glue to the slide cavity. The specimen is then gently placed on the drop of glue which promptly takes it up and, nearly as promptly, dries. The glue is moderately strong but is quickly soluble in water. Therefore, should future studies demand, specimens may be easily extracted from the mount by teasing them loose with a moist brush; this could be done repeatedly with a minimum of damage either to specimen or slide.

Celluloid strips may be cut to a size appropriate for covering the slide cavities. The slides, plus covers, may be inserted into aluminum slide holders (clip-like structures measuring 76.5 mm x 28.0 mm) which hold the cover-slips in place.

Collection numbers of specimens may be entered on the elevated, white surface of the slide; or, if a numbered grid type of slide is being used, the corresponding collection numbers may be entered in a separate card file.

The slides, slide covers, and clips described above (also see the Curtin and Company catalogue for details) are ideal for storage of a large number of specimens within a small space.

2. *Specimen Labels with Built-in Annotation Slips.* — Modern revisions of taxa entail the laborious annotation of large quantities of herbarium specimens. Thus, considerable valuable time is expended solely upon the chore of attaching annotation labels to herbarium sheets. Often, if the specimen is bulky, the worker has difficulty in finding sufficient space on the sheet to place his annotation. Such expenditures of time could become unnecessary if label size were increased to have the locality label and annotation label as one unit. The extra width thus provided to the label is also advantageous in that the larger label tends to "slip" far less during typing. Indeed, space for more than one annotation could be added to a label; one inch of additional width would provide space for two annotations. — ROBERT KRAL, VIRGINIA POLYTECHNIC INSTITUTE.